

We claim:-

1. A process for the production of a wood body having high durability, dimensional stability and surface hardness, characterized in that an untreated wood body is impregnated with an aqueous solution of
 - A) an impregnating agent from the group consisting of 1,3-bis(hydroxymethyl)-4,5-dihydroxyimidazolidin-2-one, 1,3-bis(hydroxymethyl)-4,5-dihydroxyimidazolidin-2-one modified with a C₁₋₅-alcohol, a polyol or mixtures thereof, 1,3-dimethyl-4,5-dihydroxyimidazolidin-2-one, dimethylolurea, bis(methoxymethyl)urea, tetramethylolacetylenediurea, 1,3-bis(hydroxymethyl)imidazolidin-2-one, methylolmethylurea or mixtures thereof, and
 - B) a catalyst from the group consisting of the metal or ammonium salts, organic or inorganic acids or mixtures thereof,and then hardened while maintaining humid conditions at elevated temperature.
2. The process as claimed in claim 1, characterized in that the impregnating agent used is
 - A) 1,3-bis(hydroxymethyl)-4,5-dihydroxyimidazolidin-2-one, 1,3-bis(hydroxymethyl)-4,5-dihydroxyimidazolidin-2-one modified with a C₁₋₅-alcohol, a polyol or mixtures thereof, or mixtures thereof.
3. The process as claimed in claim 1 or 2, characterized in that the impregnating agent used is A) 1,3-bis(hydroxymethyl)-4,5-dihydroxyimidazolidin-2-one modified with a C₁₋₅-alcohol, a polyol or a mixture thereof.
4. The process as claimed in any of claims 1 to 3, characterized in that an impregnating agent C) from the group consisting of a C₁₋₅-alcohol, a polyol or mixtures thereof is concomitantly used.
5. The process as claimed in claim 4, characterized in that methanol, ethanol, n-propanol, isopropanol, n-butanol, n-pentanol, ethylene glycol, diethylene glycol, 1,2- and 1,3-propylene glycol, 1,2-, 1,3- and 1,4-butylene glycol, glycerol, polyethylene glycols of the formula HO(CH₂CH₂O)_nH, where n is from 3 to 20, or mixtures thereof are concomitantly used.
6. The process as claimed in claim 5, characterized in that methanol, diethylene glycol or a mixture thereof is concomitantly used.
7. The process as claimed in any of claims 1 to 6, characterized in that the impregnating agents A) and, if appropriate, C) are used in a concentration of from 1 to 60% by weight in the aqueous solution.

8. The process as claimed in any of claims 1 to 7, characterized in that metal salts from the group consisting of metal halides, metal sulfates, metal nitrates, metal tetrafluoroborates, metal phosphates or mixtures thereof are used as catalyst B).

9. The process as claimed in claim 8, characterized in that metal salts from the group consisting of magnesium chloride, magnesium sulfate, zinc chloride, lithium chloride, lithium bromide, boron trifluoride, aluminum chloride, aluminum sulfate, zinc nitrate, sodium tetrafluoroborate or mixtures thereof are used as catalyst B).

10. The process as claimed in any of claims 1 to 9, characterized in that ammonium salts from the group consisting of ammonium chloride, ammonium sulfate, ammonium oxalate, diammonium phosphate or mixtures thereof are used as catalyst B).

11. The process as claimed in any of claims 1 to 10, characterized in that organic or inorganic acids from the group consisting of maleic acid, formic acid, citric acid, tartaric acid, oxalic acid, p-toluenesulfonic acid, hydrochloric acid, sulfuric acid, boric acid or mixtures thereof are used as catalyst B).

12. The process as claimed in any of claims 1 to 11, characterized in that magnesium chloride is used as catalyst B).

13. The process as claimed in any of claims 1 to 12, characterized in that the catalyst B) is used in a concentration of from 0.1 to 10% by weight, based on the amount of the impregnating agents A) and, if appropriate, C).

14. The process as claimed in any of claims 1 to 13, characterized in that the impregnated wood body is hardened at a relative humidity of from 50 to 100%.

15. The process as claimed in claim 14, characterized in that the impregnated wood body is hardened at a relative humidity of from 80 to 100%.

16. The process as claimed in any of claims 1 to 15, characterized in that the impregnated wood body is hardened at a temperature of from 70 to 130°C.

17. The process as claimed in any of claims 1 to 16, characterized in that the impregnated wood body is hardened over a period of from 1 to 72 hours.

18. The process as claimed in any of claims 1 to 17, characterized in that, after the impregnation, the wood body is fixed so that a change in the shape of the wood body during the hardening is counteracted.
- 5 19. A wood body having high durability, dimensional stability and surface hardness, obtainable by a process as claimed in any of claims 1 to 18.